Cardiac Risk Assessment Before Vascular Surgery

Edited by Andris Kazmers
Futura Publishing Company, Inc. Armonk, NY, 1994
364 pages

This 364 page monograph is largely the work of the Editor Prof. Kazmers, who has participated as an author in 7 of the 16 chapters in the book. In editing the book he was assisted by 13 authors and co-authors who have written different chapters alone or jointly with the editor.

The book is dedicated to an exceptionally important and until recently underestimated problem of making a precise assessment of the cardiac risk before a vascular operation. The experience of the editor has made it possible for him to appoint specialists as co-authors who are well acquainted with the problems discussed.

The Foreword is the work of Prof. Hertzer, who gives an excellent introduction based on his personal experience. In a short preface, Prof. Kazmers introduces the reader to the diagnostic methods described in the monography. The first chapter covers preoperative risk assessment before major vascular surgery. The author makes a short review in this chapter and points out that 4% to 5% of patients with peripheral vascular disease have left main CAD and 17% to 21% of them triple vessel CAD. Only 8% of patients with peripheral vascular problems have angiographically normal coronary arteries. On this basis it is logical to stress the necessity for systematic testing (screening) of patients with peripheral vascular disease for preoperative evaluation of possible complications.

In the Chapter 2, the natural history of vascular disease is briefly reviewed, separated into the three basic groups of vascular disease of the lower limbs, extracranial carotid artery atherosclerosis, abdominal aortic aneurysms and the risk they present to the patients. In Chapter 3, Eric Endean surveys the outcome after major vascular surgery, subdivided into the 3 groups. He stresses the lower surgery risk when using percutaneous transluminal angioplasty and the high risk of ruptured abdominal aortic aneurysms (40–70% mortality rate).

Chapter 4 is a basic one. In it Kazmers reviews the concept of the risk factor in major vascular surgery. The epidemiology of risk is discussed together with the risk factor by forming the triangle – host, agent and environment. In Chapter 5 he surveys the clinical assessment before vascular surgery. The different risk factors are surveyed: angina, congestive heart-failure, diabetes, hypertension, smoking, carotid bruit. The risk index of Goldman and Cooperman is also discussed.

Chapter 6 reviews electrocardiographic techniques in risk assessment before vascular surgery and Chapter 7 concentrates on radionuclide ventriculography. The importance of this method is proved, as well as its technical safety and great diagnostic value. In Chapter 8 exercise and pharmacological thallium scintigraphy is discussed, Chapter 9 covers nuclear cardiology and Chapter 10 echocardiography. In the further assessment of cardiac risk, the indications for coronary arteriography are discussed in Chapter 11 and the role of coronary angioplasty and pre-operational coronary bypass in Chapter 12.

The final chapters deal with risk assessment of other organs including the lungs, liver, kidneys, endocrine function and coagulation. Preoperative assessment with regard to anaesthetic considerations is also covered. The final conclusion is that by means of precise pre-operative assessment it is possible to lower vascular surgical morbidity and mortality. This book is a real treasure for vascular surgeons, cardiologists and anaesthetists and I strongly recommend it.

Joucho Boyanow Topalow
Sofia, Bulgaria

Cerebral Revascularisation

Authors/Editors: Bernstein, Callow, Nocolaides, Shifrin
Publishers: MED-ORION, 1994

This multi author book reviews the medical and surgical aspects of extra cranial cerebral vascular disease. There are 56 short chapters by many of the leading authorities on their subjects. The book is broken down into sections including pathophysiology, investigation, medical and surgical treatment of extra cranial cerebral vascular disease and two further sections on asymptomatic carotid stenosis, trends and developments. The chapters differ considerably in their length and content. Many familiar problems have been addressed such as the question of plaque morphology, natural history, results of medical treatment, the need for angiography prior to carotid surgery and technical aspects of the operation itself. I particularly enjoyed the sections on reconstruction of the branches of the aortic arch and the vertebral artery, the chapter on outcome in patients with asymptomatic carotid stenosis and on the natural history of patients